

BILL BARRETT CORP

Weld Cty, CO

Circle B 6-66-9 Pad

Circle B 6-66-9-0362CH

Wellbore #1

Plan: Design #1

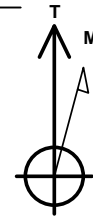
Standard Planning Report

17 October, 2013

BILL BARRETT CORP
Circle B 6-66-9-0362CH
Weld Cty, CO

Geodetic System: US State Plane 1983
Zone: Colorado Northern Zone
KB @ 4837.0usft (Original Well Elev)
Ground Level: 4814.0
Latitude: 40° 30' 33.372 N
Longitude: 104° 47' 5.892 W

Magnetic North is 8.61° East of True North (Magnetic Declination)



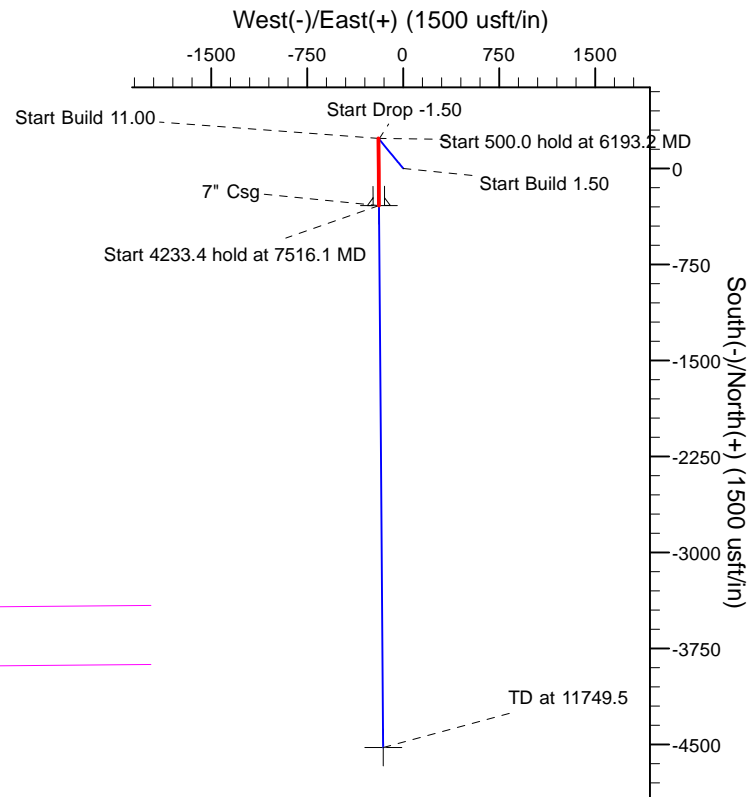
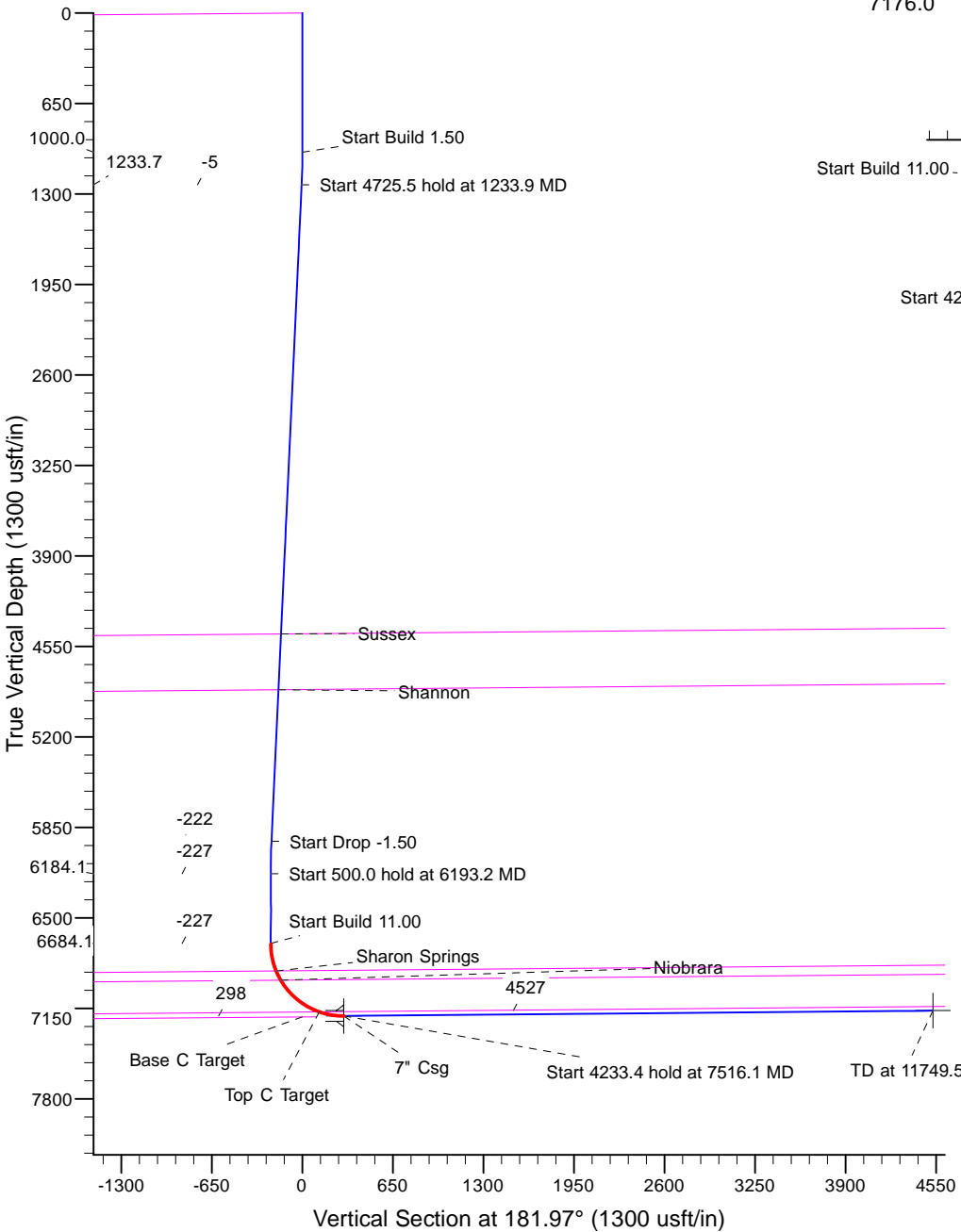
Azimuths to True North
Magnetic North: 8.62°

Magnetic Field
Strength: 52975.0snT
Dip Angle: 67.07°
Date: 6/17/2013
Model: IGRF2010

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0
1233.9	3.51	320.46	1233.7	5.5	-4.6	1.50	320.46	-5.4
5959.4	3.51	320.46	5950.4	228.5	-188.6	0.00	0.00	-221.9
6193.2	0.00	0.00	6184.1	234.0	-193.2	1.50	180.00	-227.2
6693.2	0.00	0.00	6684.1	234.0	-193.2	0.00	0.00	-227.2
7516.1	90.51	179.55	7204.9	-291.5	-189.1	11.00	179.55	297.9
11749.4	90.51	179.55	7166.9	-4524.6	-155.8	0.00	0.00	4527.3

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4461.4	4467.6	Sussex
4861.5	4868.5	Shannon
6881.7	6895.9	Sharon Springs
6948.4	6970.5	Niobrara
7176.0	7336.9	Top C Target



Plan: Design #1 (Circle B 6-66-9-0362CH/Wellbore #1)

Created By: Mike Kirby	Date: 13:56, October 17 2013
Checked: _____	Date: _____
Reviewed: _____	Date: _____
Approved: x	Date: x

Planning Report

Database:	Rocky Mountain R5000 Database	Local Co-ordinate Reference:	Well Circle B 6-66-9-0362CH
Company:	BILL BARRETT CORP	TVD Reference:	KB @ 4837.0usft (Original Well Elev)
Project:	Weld Cty, CO	MD Reference:	KB @ 4837.0usft (Original Well Elev)
Site:	Circle B 6-66-9 Pad	North Reference:	True
Well:	Circle B 6-66-9-0362CH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Weld Cty, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		Circle B 6-66-9 Pad			
Site Position:		Northing:	1,429,169.21 usft	Latitude:	40° 30' 33.372 N
From:	Lat/Long	Easting:	3,198,820.12 usft	Longitude:	104° 47' 5.892 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.46 °

Well	Circle B 6-66-9-0362CH					
Well Position	+N/-S	3.6 usft	Northing:	1,429,173.49 usft	Latitude:	40° 30' 33.408 N
	+E/-W	80.6 usft	Easting:	3,198,900.73 usft	Longitude:	104° 47' 4.848 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	4,814.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/17/2013	8.61	67.07	52,975

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	181.97

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,233.9	3.51	320.46	1,233.7	5.5	-4.6	1.50	1.50	0.00	320.46	
5,959.4	3.51	320.46	5,950.4	228.5	-188.6	0.00	0.00	0.00	0.00	
6,193.2	0.00	0.00	6,184.1	234.0	-193.2	1.50	-1.50	0.00	180.00	
6,693.2	0.00	0.00	6,684.1	234.0	-193.2	0.00	0.00	0.00	0.00	
7,516.1	90.52	179.55	7,204.9	-291.5	-189.1	11.00	11.00	0.00	179.55	
11,749.4	90.52	179.55	7,166.9	-4,524.6	-155.8	0.00	0.00	0.00	0.00	CB 0362CH PBHL (cc

Planning Report

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Company:	BILL BARRETT CORP	TVD Reference:	KB @ 4837.0usft (Original Well Elev)
Project:	Weld Cty, CO	MD Reference:	KB @ 4837.0usft (Original Well Elev)
Site:	Circle B 6-66-9 Pad	North Reference:	True
Well:	Circle B 6-66-9-0362CH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	1.50	320.46	1,100.0	1.0	-0.8	-1.0	1.50	1.50	0.00
1,200.0	3.00	320.46	1,199.9	4.0	-3.3	-3.9	1.50	1.50	0.00
1,233.9	3.51	320.46	1,233.7	5.5	-4.6	-5.4	1.50	1.50	0.00
1,300.0	3.51	320.46	1,299.7	8.6	-7.1	-8.4	0.00	0.00	0.00
1,400.0	3.51	320.46	1,399.5	13.4	-11.0	-13.0	0.00	0.00	0.00
1,500.0	3.51	320.46	1,499.4	18.1	-14.9	-17.6	0.00	0.00	0.00
1,600.0	3.51	320.46	1,599.2	22.8	-18.8	-22.1	0.00	0.00	0.00
1,700.0	3.51	320.46	1,699.0	27.5	-22.7	-26.7	0.00	0.00	0.00
1,800.0	3.51	320.46	1,798.8	32.2	-26.6	-31.3	0.00	0.00	0.00
1,900.0	3.51	320.46	1,898.6	36.9	-30.5	-35.9	0.00	0.00	0.00
2,000.0	3.51	320.46	1,998.4	41.7	-34.4	-40.5	0.00	0.00	0.00
2,100.0	3.51	320.46	2,098.2	46.4	-38.3	-45.0	0.00	0.00	0.00
2,200.0	3.51	320.46	2,198.0	51.1	-42.2	-49.6	0.00	0.00	0.00
2,300.0	3.51	320.46	2,297.9	55.8	-46.1	-54.2	0.00	0.00	0.00
2,400.0	3.51	320.46	2,397.7	60.5	-50.0	-58.8	0.00	0.00	0.00
2,500.0	3.51	320.46	2,497.5	65.3	-53.9	-63.4	0.00	0.00	0.00
2,600.0	3.51	320.46	2,597.3	70.0	-57.8	-67.9	0.00	0.00	0.00
2,700.0	3.51	320.46	2,697.1	74.7	-61.7	-72.5	0.00	0.00	0.00
2,800.0	3.51	320.46	2,796.9	79.4	-65.6	-77.1	0.00	0.00	0.00
2,900.0	3.51	320.46	2,896.7	84.1	-69.5	-81.7	0.00	0.00	0.00
3,000.0	3.51	320.46	2,996.5	88.9	-73.4	-86.3	0.00	0.00	0.00
3,100.0	3.51	320.46	3,096.4	93.6	-77.3	-90.9	0.00	0.00	0.00
3,200.0	3.51	320.46	3,196.2	98.3	-81.1	-95.4	0.00	0.00	0.00
3,300.0	3.51	320.46	3,296.0	103.0	-85.0	-100.0	0.00	0.00	0.00
3,400.0	3.51	320.46	3,395.8	107.7	-88.9	-104.6	0.00	0.00	0.00
3,500.0	3.51	320.46	3,495.6	112.4	-92.8	-109.2	0.00	0.00	0.00
3,600.0	3.51	320.46	3,595.4	117.2	-96.7	-113.8	0.00	0.00	0.00
3,700.0	3.51	320.46	3,695.2	121.9	-100.6	-118.3	0.00	0.00	0.00
3,800.0	3.51	320.46	3,795.0	126.6	-104.5	-122.9	0.00	0.00	0.00
3,900.0	3.51	320.46	3,894.9	131.3	-108.4	-127.5	0.00	0.00	0.00
4,000.0	3.51	320.46	3,994.7	136.0	-112.3	-132.1	0.00	0.00	0.00
4,100.0	3.51	320.46	4,094.5	140.8	-116.2	-136.7	0.00	0.00	0.00
4,200.0	3.51	320.46	4,194.3	145.5	-120.1	-141.2	0.00	0.00	0.00
4,300.0	3.51	320.46	4,294.1	150.2	-124.0	-145.8	0.00	0.00	0.00
4,400.0	3.51	320.46	4,393.9	154.9	-127.9	-150.4	0.00	0.00	0.00
4,467.6	3.51	320.46	4,461.4	158.1	-130.5	-153.5	0.00	0.00	0.00
Sussex									
4,500.0	3.51	320.46	4,493.7	159.6	-131.8	-155.0	0.00	0.00	0.00
4,600.0	3.51	320.46	4,593.5	164.3	-135.7	-159.6	0.00	0.00	0.00
4,700.0	3.51	320.46	4,693.4	169.1	-139.6	-164.2	0.00	0.00	0.00
4,800.0	3.51	320.46	4,793.2	173.8	-143.5	-168.7	0.00	0.00	0.00
4,868.5	3.51	320.46	4,861.5	177.0	-146.1	-171.9	0.00	0.00	0.00
Shannon									

Planning Report

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Company:	BILL BARRETT CORP	TVD Reference:	KB @ 4837.0usft (Original Well Elev)
Project:	Weld Cty, CO	MD Reference:	KB @ 4837.0usft (Original Well Elev)
Site:	Circle B 6-66-9 Pad	North Reference:	True
Well:	Circle B 6-66-9-0362CH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,900.0	3.51	320.46	4,893.0	178.5	-147.4	-173.3	0.00	0.00	0.00
5,000.0	3.51	320.46	4,992.8	183.2	-151.3	-177.9	0.00	0.00	0.00
5,100.0	3.51	320.46	5,092.6	187.9	-155.2	-182.5	0.00	0.00	0.00
5,200.0	3.51	320.46	5,192.4	192.7	-159.1	-187.1	0.00	0.00	0.00
5,300.0	3.51	320.46	5,292.2	197.4	-163.0	-191.6	0.00	0.00	0.00
5,400.0	3.51	320.46	5,392.0	202.1	-166.9	-196.2	0.00	0.00	0.00
5,500.0	3.51	320.46	5,491.9	206.8	-170.7	-200.8	0.00	0.00	0.00
5,600.0	3.51	320.46	5,591.7	211.5	-174.6	-205.4	0.00	0.00	0.00
5,700.0	3.51	320.46	5,691.5	216.2	-178.5	-210.0	0.00	0.00	0.00
5,800.0	3.51	320.46	5,791.3	221.0	-182.4	-214.6	0.00	0.00	0.00
5,900.0	3.51	320.46	5,891.1	225.7	-186.3	-219.1	0.00	0.00	0.00
5,959.4	3.51	320.46	5,950.4	228.5	-188.6	-221.9	0.00	0.00	0.00
6,000.0	2.90	320.46	5,990.9	230.2	-190.1	-223.6	1.50	-1.50	0.00
6,100.0	1.40	320.46	6,090.9	233.1	-192.5	-226.4	1.50	-1.50	0.00
6,193.2	0.00	0.00	6,184.1	234.0	-193.2	-227.2	1.50	-1.50	0.00
6,200.0	0.00	0.00	6,190.9	234.0	-193.2	-227.2	0.00	0.00	0.00
6,300.0	0.00	0.00	6,290.9	234.0	-193.2	-227.2	0.00	0.00	0.00
6,400.0	0.00	0.00	6,390.9	234.0	-193.2	-227.2	0.00	0.00	0.00
6,500.0	0.00	0.00	6,490.9	234.0	-193.2	-227.2	0.00	0.00	0.00
6,600.0	0.00	0.00	6,590.9	234.0	-193.2	-227.2	0.00	0.00	0.00
6,693.2	0.00	0.00	6,684.1	234.0	-193.2	-227.2	0.00	0.00	0.00
6,700.0	0.74	179.55	6,690.9	234.0	-193.2	-227.2	11.00	11.00	0.00
6,800.0	11.74	179.55	6,790.1	223.1	-193.1	-216.3	11.00	11.00	0.00
6,895.9	22.30	179.55	6,881.7	195.1	-192.9	-188.3	11.00	11.00	0.00
Sharon Springs									
6,900.0	22.74	179.55	6,885.5	193.5	-192.9	-186.7	11.00	11.00	0.00
6,970.5	30.50	179.55	6,948.4	162.0	-192.6	-155.2	11.00	11.00	0.00
Niobrara									
7,000.0	33.74	179.55	6,973.4	146.2	-192.5	-139.5	11.00	11.00	0.00
7,100.0	44.74	179.55	7,050.8	83.1	-192.0	-76.4	11.00	11.00	0.00
7,200.0	55.74	179.55	7,114.6	6.3	-191.4	0.3	11.00	11.00	0.00
7,300.0	66.74	179.55	7,162.6	-81.2	-190.7	87.7	11.00	11.00	0.00
7,336.9	70.80	179.55	7,176.0	-115.6	-190.5	122.1	11.00	11.00	0.00
Top C Target									
7,400.0	77.74	179.55	7,193.1	-176.3	-190.0	182.7	11.00	11.00	0.00
7,500.0	88.74	179.55	7,204.8	-275.4	-189.2	281.8	11.00	11.00	0.00
7,516.1	90.52	179.55	7,204.9	-291.5	-189.1	297.9	11.00	11.00	0.00
7" Csg									
7,600.0	90.52	179.55	7,204.2	-375.4	-188.4	381.7	0.00	0.00	0.00
7,700.0	90.52	179.55	7,203.3	-475.4	-187.6	481.6	0.00	0.00	0.00
7,800.0	90.52	179.55	7,202.4	-575.4	-186.8	581.5	0.00	0.00	0.00
7,900.0	90.52	179.55	7,201.5	-675.4	-186.1	681.4	0.00	0.00	0.00
8,000.0	90.52	179.55	7,200.6	-775.4	-185.3	781.3	0.00	0.00	0.00
8,100.0	90.52	179.55	7,199.7	-875.4	-184.5	881.2	0.00	0.00	0.00
8,200.0	90.52	179.55	7,198.8	-975.4	-183.7	981.1	0.00	0.00	0.00
8,300.0	90.52	179.55	7,197.9	-1,075.4	-182.9	1,081.0	0.00	0.00	0.00
8,400.0	90.52	179.55	7,197.0	-1,175.4	-182.1	1,180.9	0.00	0.00	0.00
8,500.0	90.52	179.55	7,196.1	-1,275.4	-181.3	1,280.9	0.00	0.00	0.00
8,600.0	90.52	179.55	7,195.2	-1,375.4	-180.6	1,380.8	0.00	0.00	0.00
8,700.0	90.52	179.55	7,194.3	-1,475.4	-179.8	1,480.7	0.00	0.00	0.00
8,800.0	90.52	179.55	7,193.4	-1,575.3	-179.0	1,580.6	0.00	0.00	0.00
8,900.0	90.52	179.55	7,192.5	-1,675.3	-178.2	1,680.5	0.00	0.00	0.00
9,000.0	90.52	179.55	7,191.6	-1,775.3	-177.4	1,780.4	0.00	0.00	0.00

Planning Report

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Project:	Weld Cty, CO	MD Reference:	KB @ 4837.0usft (Original Well Elev)
Site:	Circle B 6-66-9 Pad	North Reference:	True
Well:	Circle B 6-66-9-0362CH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
9,100.0	90.52	179.55	7,190.7	-1,875.3	-176.6	1,880.3	0.00	0.00	0.00	
9,200.0	90.52	179.55	7,189.8	-1,975.3	-175.8	1,980.2	0.00	0.00	0.00	
9,300.0	90.52	179.55	7,188.9	-2,075.3	-175.1	2,080.1	0.00	0.00	0.00	
9,400.0	90.52	179.55	7,188.0	-2,175.3	-174.3	2,180.0	0.00	0.00	0.00	
9,500.0	90.52	179.55	7,187.1	-2,275.3	-173.5	2,279.9	0.00	0.00	0.00	
9,600.0	90.52	179.55	7,186.2	-2,375.3	-172.7	2,379.8	0.00	0.00	0.00	
9,700.0	90.52	179.55	7,185.3	-2,475.3	-171.9	2,479.7	0.00	0.00	0.00	
9,800.0	90.52	179.55	7,184.4	-2,575.3	-171.1	2,579.6	0.00	0.00	0.00	
9,900.0	90.52	179.55	7,183.5	-2,675.3	-170.4	2,679.5	0.00	0.00	0.00	
10,000.0	90.52	179.55	7,182.6	-2,775.3	-169.6	2,779.5	0.00	0.00	0.00	
10,100.0	90.52	179.55	7,181.7	-2,875.3	-168.8	2,879.4	0.00	0.00	0.00	
10,200.0	90.52	179.55	7,180.8	-2,975.2	-168.0	2,979.3	0.00	0.00	0.00	
10,300.0	90.52	179.55	7,179.9	-3,075.2	-167.2	3,079.2	0.00	0.00	0.00	
10,400.0	90.52	179.55	7,179.0	-3,175.2	-166.4	3,179.1	0.00	0.00	0.00	
10,500.0	90.52	179.55	7,178.1	-3,275.2	-165.6	3,279.0	0.00	0.00	0.00	
10,600.0	90.52	179.55	7,177.2	-3,375.2	-164.9	3,378.9	0.00	0.00	0.00	
10,700.0	90.52	179.55	7,176.3	-3,475.2	-164.1	3,478.8	0.00	0.00	0.00	
10,800.0	90.52	179.55	7,175.4	-3,575.2	-163.3	3,578.7	0.00	0.00	0.00	
10,900.0	90.52	179.55	7,174.5	-3,675.2	-162.5	3,678.6	0.00	0.00	0.00	
11,000.0	90.52	179.55	7,173.6	-3,775.2	-161.7	3,778.5	0.00	0.00	0.00	
11,100.0	90.52	179.55	7,172.7	-3,875.2	-160.9	3,878.4	0.00	0.00	0.00	
11,200.0	90.52	179.55	7,171.8	-3,975.2	-160.1	3,978.3	0.00	0.00	0.00	
11,300.0	90.52	179.55	7,170.9	-4,075.2	-159.4	4,078.2	0.00	0.00	0.00	
11,400.0	90.52	179.55	7,170.0	-4,175.2	-158.6	4,178.1	0.00	0.00	0.00	
11,500.0	90.52	179.55	7,169.1	-4,275.2	-157.8	4,278.1	0.00	0.00	0.00	
11,600.0	90.52	179.55	7,168.2	-4,375.1	-157.0	4,378.0	0.00	0.00	0.00	
11,700.0	90.52	179.55	7,167.3	-4,475.1	-156.2	4,477.9	0.00	0.00	0.00	
11,749.4	90.52	179.55	7,166.9	-4,524.6	-155.8	4,527.3	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude		Longitude
- hit/miss target										
- Shape										
CB 0362CH PBHL (copy - plan hits target center - Point	0.00	358.35	7,166.9	-4,524.6	-155.8	1,424,647.78	3,198,781.43	40° 29' 48.697 N		104° 47' 6.865 W
CB 0362CH LP (copy) (c - plan hits target center - Point	0.00	358.35	7,204.9	-291.4	-189.1	1,428,880.55	3,198,714.00	40° 30' 30.528 N		104° 47' 7.296 W

Casing Points							
Measured Depth (usft)	Vertical Depth (usft)	Name				Casing Diameter (")	Hole Diameter (")
7,516.1	7,204.9	7" Csg				7	8-3/4

Planning Report

Database:	Rocky Mountain R5000 Database	Local Co-ordinate Reference:	Well Circle B 6-66-9-0362CH
Company:	BILL BARRETT CORP	TVD Reference:	KB @ 4837.0usft (Original Well Elev)
Project:	Weld Cty, CO	MD Reference:	KB @ 4837.0usft (Original Well Elev)
Site:	Circle B 6-66-9 Pad	North Reference:	True
Well:	Circle B 6-66-9-0362CH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,467.6	4,461.4	Sussex		-0.50	179.55	
4,868.5	4,861.5	Shannon		-0.50	179.55	
6,895.9	6,881.7	Sharon Springs		-0.50	179.55	
6,970.5	6,948.4	Niobrara		-0.50	179.55	
7,336.9	7,176.0	Top C Target		-0.50	179.55	